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9231

7590

12/16/2004

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EXAMINER

GHALI, ISIS A D

ART UNIT

PAPER NUMBER

1615

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



### **DETAILED ACTION**

The receipt is acknowledged of applicants' amendment, and request for extension of time, filed 09/16/2004.

Claims 5, 11, and 13-20 have been canceled, and claims 34-36 have been added.

Claims 1-4, 6-10, 12, 21-36 are included in the prosecution.

#### ***Claim Rejections - 35 USC § 112***

1. Claims 1-4, 6-10, 12, 21-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "enriched concentration" that does not set forth the metes and bounds of the claim. Recourse to the specification does not define the expression. Clarification is requested.

#### ***Claim Rejections - 35 USC § 103***

2. Claim 1-4, 6-10, 12, 21-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilchist et al., US 6,187,290 ('290) in view of Ladin, US 5,792,090 ('090).

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The present claim 1 is directed to a product comprising matrix of polymer network dispersed therein non-gellable polysaccharide and closed cells containing oxygen.

US '290 disclosed a product suitable for wound dressing made of foam comprising foam product comprising mixture of polyacrylamide and guar gum (abstract; col.4, lines 12-20; col.6, lines 18-19). The foam comprises gas entrapped into small bubbles therein forming closed cell foam (col.2, lines 26-32; col.3, lines 40-43). The foam formulation comprises active agents selected from antibacterial agents, such as chlorhexidine and silver; growth factor; and protein (col.4, lines 41-50; col.5, lines 5-10). The foam composition further comprises glycerol and water that claimed by applicants' as plasticizer and hydration agents; and silicone that claimed by applicants' as water loss control agent (col.2, line 34; col.7, line 11).

The difference between US '290 teachings and the present invention is that US '290 does not teach the gas entrapped in the foam to be oxygen. The limitation of generating the oxygen during manufacture of the matrix does impart patentability to the claims because the claims are directed to product not a process.

US '090 teaches wound dressing that supply oxygen to the wound for optimal healing and minimization of infection because the wound causes diffusion limited access and limits the oxygen supply to the wound (abstract; col.2, lines 28-31). The dressing comprises elements that react to generate oxygen that are hydrogen peroxide and catalyst such as such magnesium dioxide or enzymes (col.6, lines 6-26).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide closed cell foam comprising polymer network and

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polysaccharide with gas entrapped in the foam as disclosed by US '290, and replace the gas by oxygen as disclosed by US '090, motivated by the teaching of US '090 that the wound dressing that supply oxygen to the wound provides optimal healing and minimization of infection because the wound causes diffusion limited access and limits the oxygen supply to the wound, with reasonable expectation of having closed cell foam comprising polymer network and polysaccharide with the oxygen entrapped therein that provides optimal wound healing with minimal risk of infection.

### ***Response to Arguments***

3. Applicant's arguments filed 09/16/2004 have been fully considered but they are not persuasive.

Applicants traverse the rejection of the claims as being unpatentable over US '290 in view of US 090 by arguing that Us '290 does not teach or suggest the delivery of any gas to the wound site. US '090 can not be combined with US '290 that does not teach the delivery of any gas to a wound in order to render applicants' currently claimed invention obvious.

In response to the above argument, the examiner position is that the claims are directed to product, and all the elements of the product are disclosed by the combined teaching of the references. The intended use of the matrix to deliver oxygen does not impart patentability to the claims. The prior art recognized the delivery of oxygen to the wound site, as disclosed by US '090. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness

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can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one having ordinary skill in the art would have entrapped oxygen into the open cell foam motivated by the teaching of US '090 that the wound dressing that supply oxygen to the wound provides optimal healing and minimization of infection because the wound causes diffusion limited access and limits the oxygen supply to the wound, with reasonable expectation of having closed cell foam comprising polymer network and polysaccharide with the oxygen entrapped therein that provides optimal wound healing with minimal risk of infection. In considering the disclosure of the reference, it is proper to take into account not only the specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). The rational to modify or to combine the prior art does not have to be expressly stated in the prior art; the rational may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art. The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve different problem. It is not necessary that the prior art suggest the combination or modification to

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achieve the same advantage or result discovered by applicant. *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972).

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isis Ghali whose telephone number is (571) 272-0595. The examiner can normally be reached on Monday-Thursday, 7:00 to 5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isis Ghali  
Examiner  
Art Unit 1615



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